

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-6 (Cancelled)

7. (Previously Presented) A method for producing a biochip comprising the steps of:

providing a substantially planar base plate;

supplying, onto the upper surface of said base plate, a plurality of solution samples, each containing a capture used to specifically react with a specimen in order to obtain information on a structure or a function of said specimen; and

supplying a solution containing no capture in accordance with an ink-jet system separately from and in the same location as each of said solution samples

wherein one of said solution sample and said solution containing no capture is supplied onto the other one of said solution sample and said solution containing no capture while said other one of said solution sample and said solution containing no capture is in solution form.

8. (Previously Presented) The method for producing said biochip according to claim 7, wherein said solution sample is supplied in accordance with an ink-jet system.

Claims 9 and 10 (Cancelled)

11. (Previously Presented) The method for producing said biochip according to claim 7, wherein said solution containing no capture is an immobilization solution for immobilizing said captures onto said base plate, or an immobilization-reinforcing

solution for reinforcing immobilization of said captures onto said base plate.

12. (Previously Presented) The method for producing said biochip according to claim 11, wherein said immobilization solution or said immobilization-reinforcing solution is a solution with which immobilization or immobilization reinforcement is advanced by mixing said immobilization solution or said immobilization-reinforcing solution with said solution sample.

13. (Previously Presented) The method for producing said biochip according to claim 11, wherein said solution sample is supplied onto said base plate, and then said immobilization solution or said immobilization-reinforcing solution is supplied to parts to which said solution sample has been supplied.

14. (Previously Presented) The method for producing said biochip according to claim 11, wherein said immobilization solution or said immobilization-reinforcing solution is supplied onto said base plate, and then said solution sample is supplied to parts to which said immobilization solution or said immobilization-reinforcing solution has been supplied.

15. (Previously Presented) The method for producing said biochip according to claim 11, wherein said immobilization solution or said immobilization-reinforcing solution and said solution sample are supplied substantially simultaneously onto said base plate.

16. (Original) The method for producing said biochip according to claim 7, wherein said captures are nucleic acids.

17. (Original) The method for producing said biochip according to claim 16,

wherein said nucleic acid is DNA and/or fragment thereof or amplified product thereof; cDNA and/or fragment thereof or amplified product thereof; RNA or antisense RNA and/or fragment thereof or amplified product thereof; chemically synthesized DNA or amplified product thereof; or chemically synthesized RNA or amplified product thereof.

18. (Original) The method for producing said biochip according to claim 7, wherein said captures are proteins.

19. (Original) The method for producing said biochip according to claim 18, wherein said protein is antigen, antibody, lectin, adhesin, receptor for physiologically active substance, or peptide.

20. (Original) The method for producing said biochip according to claim 14, wherein said immobilization solution is a solution of chemical substance having positive charge, and said capture is immobilized by means of ionic bond.

21. (Previously Presented) The method for producing said biochip according to claim 20, wherein said chemical substance is poly-L-lysine, polyalkylamine or a silane coupling agent.

22. (Original) The method for producing said biochip according to claim 14, wherein said immobilization solution includes a chemical substance for chemically modifying a base plate surface, and a functional group introduced into said base plate surface and a functional group introduced by modifying said capture are subjected to a chemical reaction to immobilize said capture onto said base plate by means of covalent bond.

23. (Original) The method for producing said biochip according to claim 22, wherein said chemical reaction is a reaction of amino group and aldehyde group, a reaction of amino group and N-hydroxysuccinimido group, a reaction of amino group and carboxyl group, a reaction of amino group and epoxy group, or a reaction of thiol group and epoxy group.
24. (Original) The method for producing said biochip according to claim 14, wherein said immobilization solution includes avidin, streptavidin, protamine, or histone.
25. (Previously Presented) The method for producing said biochip according to claim 14, wherein said immobilization solution is a solution containing a hydrophobic group.
26. (Original) The method for producing said biochip according to claim 14, wherein said immobilization-reinforcing solution includes a water-retentive substance.
27. (Original) The method for producing said biochip according to claim 26, wherein said water-retentive substance is colominic acid, hyaluronic acid, or mixture of colominic acid and hyaluronic acid.
28. (Original) The method for producing said biochip according to claim 14, wherein said immobilization-reinforcing solution includes a high-molecular substance.
29. (Previously Presented) The method for producing said biochip according to claim 28, wherein said high-molecular substance is one of an acidic polymer, a basic polymer, a neutral polymer, and a protein.

30. (Previously Presented) The method for producing said biochip according to claim 11, further comprising preparing a jig to which a plurality of said base plates are set, wherein said solution sample and said solution containing no capture are supplied in a state in which said base plates are fixed on said jig.

31. (Previously Presented) The method for producing said biochip according to claim 11, wherein an area, in which said solution containing no capture is supplied onto said base plate, is substantially the same as an area to which said solution sample is supplied, or an area which includes said area to which said solution sample is supplied, said area having a substantially circular shape.

32. (Previously Presented) The method for producing said biochip according to claim 11, wherein an area, in which said solution containing no capture is supplied onto said base plate, has a size which includes two or more areas to each of which said solution sample is supplied.

Claims 33-57 (Cancelled)

58. (Previously Presented) The method for producing said biochip according to claim 20, wherein said chemical substance is γ -aminopropyltriethoxysilane.

59. (Previously Presented) The method for producing said biochip according to claim 14, wherein said immobilization solution is a solution containing one of a phenyl group and an alkyl group.

60. (Previously Presented) The method for producing said biochip according to claim 28, wherein said high-molecular substance is one of CM-cellulose, nitrocellulose, polyacrylic acid, and alginic acid.

61. (Previously Presented) The method for producing said biochip according to claim 28, wherein said high-molecular substance is one of polyethyleneimine and polyacrylamide.
62. (Previously Presented) The method for producing said biochip according to claim 28, wherein said high-molecular substance is one of methyl cellulose, polyethylene glycol, and polypropylene glycol.
63. (Previously Presented) The method for producing said biochip according to claim 28, wherein said high-molecular substance is one of BSA, egg albumin, and lysozyme.
64. (New) The method for producing said biochip according to claim 7, wherein said solution containing no capture is of a common composition used with a plurality of different solution samples.